

CLAIMS

1. A bag (1, 101, 201) consisting of two faces (1a, 1b) joined together around their whole periphery, with the exception of one longitudinal edge, the bag having an opening (1d) emerging at said longitudinal edge, the two faces of the bag being welded to one another along two opposite lateral edges (2, 3), at least one face having, near said opening, at least one elastic band (16, 116, 216) joined to said face by two connection regions (17, 117, 217; 2a, 17') in such a way that the effective relaxed length (L2) of said elastic band between the two connection regions corresponds to the gap between the two connection regions on the bag and is shorter than the length (L1) of the longitudinal edge of said face of the bag, characterized in that the elastic band (16, 116, 216) extends across the whole width of the bag, from one lateral edge to the other, said elastic band being welded to the two faces of the bag along said lateral edges, at least one of the abovementioned two connection regions forming an "intermediate" connection region (17, 117, 217, 17') located at a distance from the abovementioned two lateral edges.
2. The bag as claimed in claim 1, characterized in that each face of the bag (1, 101) comprises a hem (8) bordering said opening (1d), in which is placed a non-elastic drawstring (6, 106), it being possible for each non-elastic drawstring to be grasped from the outside via at least one notch (12, 112) made through said hems.
3. The bag as claimed in claim 2, characterized in that each face of the bag (1, 101) is folded inward, along the longitudinal edge of the bag, in

such a way that part of the fold (4) forms the abovementioned hem (8) and extends beyond it by a skirt (4b), said elastic band (16, 116) being joined to the corresponding face of the bag by overlapping said skirt at least partially.

4. The bag as claimed in claim 1, characterized in that each face of the bag (201) associated with the elastic band (216) is folded inward along the longitudinal edge of the bag, in such a way that the elastic band is joined to said face, overlapping said fold (4) at least partially.
5. The bag as claimed in one of claims 1 to 4, characterized in that the other of the abovementioned two connection regions forms another intermediate connection region (17') located at a distance from the abovementioned two lateral edges (2, 3) and from the first intermediate connection region (17).
6. The bag as claimed in one of claims 1 to 4, characterized in that the other of the abovementioned two connection regions consists of the region where the elastic band is welded (2a) to the lateral edge (2) of the bag furthest from the abovementioned intermediate connection region (17, 117, 217).
7. The bag as claimed in one of claims 1 to 6, characterized in that each elastic band (16, 216) is joined to an inside face of the bag (1, 101).
8. The bag as claimed in one of claims 1 to 6, characterized in that each elastic band (116, 116a, 116b) is joined to an outer face of the bag (101).

9. The bag as claimed in one of claims 1 to 8, characterized in that each elastic band is cut longitudinally into two vertically adjacent tapes (116a, 116b), whose respective connection regions (117a, 117b) lie in the vertical extension of one another, so that the two tapes form a closed loop with the bag, each tape of said loop being designed to extend around an opposite side of a container.
10. The bag as claimed in one of claims 1 to 9, characterized in that the elastic band (6, 16, 116) has a degree of elongation of less than 150%, and preferably of around 100%.
11. A method for the continuous production of a series of bags, said method comprising the steps consisting in:
- a) placing at least one elastic strip (16) inside a folded sheet (20), along one of the longitudinal edges of the sheet;
  - b) making, at regular intervals corresponding to the width of a bag, at least one transverse heat weld (17) limited to the height of the elastic strip only, so as to form an intermediate connection region between the elastic strip and the corresponding inside face of the sheet;
  - c) making, at regular intervals corresponding to the width of a bag, a plurality of pairs of adjacent transverse heat welds (2a, 3a) corresponding to the lateral edges of the bags, in such a way as to heat weld the abovementioned elastic strip to the lateral edges of the bags, said pairs of transverse heat welds being made at a distance from the abovementioned limited transverse heat welds (17);

d) making pre-cuts, at regular intervals, on the sheet (20) between the transverse heat welds of each pair, to form a series of pre-cut bags.

5 12. The method as claimed in claim 11, characterized in that it comprises the additional step of:

10 e) before step a) or b), folding each longitudinal edge of the sheet inward to form an internal fold (4), the abovementioned elastic strip (16) being placed on a fold, with an at least partial overlap.

15 13. The method as claimed in claim 12, characterized in that it comprises the additional steps, before step a), of:

20 f) cutting portions of film (12) near the two longitudinal edges of the folded sheet (20), at regular intervals corresponding at least to the width of a bag, for example one or two bag widths;

25 g) placing two non-elastic strips (6) inside said folded sheet, in line with said cut portions on each face of the sheet so that each non-elastic strip is housed inside a fold;

30 h) heat welding the folds (4) parallel to the longitudinal direction (F), to form a hem in which each non-elastic strip is housed, the elastic strip at least partially overlapping the remaining portion of the fold which forms a skirt.